TABLE M.5.6.1.2–3.—National Ignition Facility Accident Frequency and Consequences (Median Meteorology)

		MEI		Offsite Population ^a		Individual Noninvolved Worker		Noninvolved Worker Population	
Accident	Frequency (per year)	Dose (rem)	LCFs b	Dose (person- rem)	LCFs ^c	Dose (rem)	LCFs b	Dose (person- rem)	LCFs c
Earthquake during No Action Alternative operations	2.0 × 10 ⁻⁸	4.78×10^{-4}	2.87×10^{-7}	1.96 × 10 ⁻¹	1.18 × 10 ⁻⁴	1.43×10^{-3}	8.60 × 10 ⁻⁷	2.08 × 10 ⁻¹	1.25 × 10 ⁻⁴
Earthquake during depleted uranium shot	2.0 × 10 ⁻⁹	9.68 × 10 ⁻⁴	5.81 × 10 ⁻⁷	2.40×10^{-1}	1.44 × 10 ⁻⁴	2.55×10^{-3}	1.53 × 10 ⁻⁶	3.48×10^{-1}	2.09 × 10 ⁻⁴
Earthquake during highly enriched uranium shot	2.0 × 10 ⁻⁹	1.02×10^{-3}	6.09×10^{-7}	2.47×10^{-1}	1.48 × 10 ⁻⁴	2.64×10^{-3}	1.59 × 10 ⁻⁶	3.59×10^{-1}	2.16 × 10 ⁻⁴
Earthquake during thorium shot	2.0 × 10 ⁻⁹	1.04×10^{-3}	6.24×10^{-7}	2.43×10^{-1}	1.46 × 10 ⁻⁴	2.65×10^{-3}	1.59 × 10 ⁻⁶	3.57×10^{-1}	2.14 × 10 ⁻⁴
Earthquake during tracer shot	2.0 × 10 ⁻⁹	5.44 × 10 ⁻⁴	3.26×10^{-7}	2.09×10^{-1}	1.26 × 10 ⁻⁴	1.63×10^{-3}	9.80 × 10 ⁻⁷	2.29×10^{-1}	1.38 × 10 ⁻⁴
Earthquake during plutonium without yield shot	2.0 × 10 ⁻⁹	1.65×10^{-3}	9.89×10^{-7}	5.46 × 10 ⁻¹	3.28×10^{-4}	4.99×10^{-3}	3.00×10^{-6}	7.41×10^{-1}	4.45×10^{-4}
Earthquake during plutonium with yield shot	2.0 × 10 ⁻⁹	9.01 × 10 ⁻⁴	5.41 × 10 ⁻⁷	3.16×10^{-1}	1.90 × 10 ⁻⁴	2.69×10^{-3}	1.62 × 10 ⁻⁶	3.96 × 10 ⁻¹	2.38 × 10 ⁻⁴

Source: LLNL 2003d..

LCFs = latent cancer fatalities; MEI = maximally exposed individual.

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^a Based on the population of approximately 6,900,000 persons residing within 50 miles of LLNL.

b Increased likelihood of a latent cancer fatality.

^c Increased number of latent cancer fatalities.